

8/10/04

In the claims:

Claims 1-7 cancelled.

8. (New) A method of influencing the body, comprising the steps of registering physical parameter biopotentials; transforming and processing of obtained data to calculate a biosignal characteristic generalized parameter; transforming the biosignal characteristic generalized parameter on the basis of detected criterial correspondence into a control signal and forming an external sound effect; implementing the external sound effect in the form of generation of musical sounds by a parametric variation tone, volume and duration thereof in criterial relation to variation of discrete current values of the characteristic generalized parameter of a frequency spectrum of the transformed biosignal; isolating from register graphic information time intervals of identical duration and transforming the time intervals using Fourier harmonic analysis into a frequency spectrum; isolating common frequent ranges (Δ , Θ , δ , β) persuant to an internal standard $\Delta = 0.1\text{-}3.9$ Hz, $\Theta = 4.0\text{-}7.9$ Hz, $\delta = 8.0\text{-}12.9$ Hz, $\beta = 13.0\text{-}32.0$ Hz; determining a dimensionless generalized characteristic parameter for each spectral interval with respect to power spectral densities (of Θ and Δ intervals, namely:

$$K_1 = P_1 \frac{P\Theta}{\beta} = \frac{15.0}{30.0} = 0.5 \text{ for } 1^{\text{st}} \text{ second}$$

$$K_2 = \frac{P_2\Theta}{P_2\beta} = \frac{42.0}{20.0} = 2.1 \text{ for } 2^{\text{nd}} \text{ second}$$

$$K_3 = \frac{P_3\Theta}{P_3\beta} = \frac{54.0}{12.0} = 4.5 \text{ for } 3^{\text{rd}} \text{ second}$$

$$K_4 = \frac{P_4\Theta}{P_4\beta} = \frac{76.0}{20.0} = 3.8 \text{ for } 4^{\text{th}} \text{ second}$$

$$K_5 = \frac{P_5\Theta}{P_5\beta} = \frac{81.4}{11.0} = 7.4 \text{ for } 5^{\text{th}} \text{ second}$$

$$K_6 = \frac{P_6\Theta}{P_6\beta} = \frac{105.0}{10.0} = 10.5 \text{ for } 6^{\text{th}} \text{ second}$$

$$K_7 = \frac{P_7\Theta}{P_7\beta} = \frac{78.4}{9.3} = 0.8 \text{ for } 7^{\text{th}} \text{ second}$$

$$K_8 = \frac{P_8\Theta}{P_8\beta} = \frac{101.8}{5.5} = 18.5 \text{ for } 8^{\text{th}} \text{ second}$$

$$K_9 = \frac{P_9\Theta}{P_9\beta} = \frac{51.0}{8.5} = 6.0 \text{ for } 9^{\text{th}} \text{ second}$$

$$K_{10} = \frac{P_{10}\Theta}{P_{10}\beta} = \frac{135.0}{6.0} = 12.5 \text{ for } 10^{\text{th}} \text{ second}$$

wherein K is a dimensionless generalized parameter and P Θ , P β is spectral density of characteristic band power (sq. μ V/sec); on the basis of calculation results determining a numerical interval between a minimum ($K_1=0.5$) and a maximum ($K_9=18.5$) values of generalized characteristic parameter, where drawn in a proportional range of musical sound parameters including 36 notes of three octaves for piano, 8 volume gradations, and 8 duration segments which

reflects criterial relation among them; using a numerical value of the generalized dimensionless parameter of each spectral interval to determine appropriate parameters of musical sound, which in a sequence appropriate to original recorded alternation of time intervals are transformed by a sound card into a brain music; recording the brain music on a magnetic medium; and using an external sound effect of the brain music for a music therapy.

9. (New) A method as defined in claim 8; further comprising determining the generalized dimensionless parameter by a ratio of power spectral densities of at least two characteristic frequency bands selected in the each spectral interval.

10. (New) A method of influencing the body, comprising the steps of registering physical parameter biopotentials; transforming and processing of obtained data to calculate a biosignal characteristic generalized parameter; transforming the biosignal characteristic generalized parameter on the basis of detected criterial correspondence into a control signal and forming an external sound effect; implementing the external sound effect in the form of generation of musical sounds by a parametric variation tone, volume and duration thereof in criterial relation to variation of discrete current values of the

characteristic generalized parameter of a frequency spectrum of the transformed biosignal; isolating from register graphic information time intervals of identical duration and transforming the time intervals using Fourier harmonic analysis into a frequency spectrum; isolating common frequent ranges; pursuant determining a dimensionless generalized characteristic parameter for each spectral interval with respect to power spectral densities; on the basis of calculation results determining a numerical interval between a minimum and a maximum values of generalized characteristic parameter, where drawn in a proportional range of musical sound parameters including 36 notes of three octaves for piano, 8 volume gradations, and 8 duration segments which reflects criterial relation among them; using a numerical value of the generalized dimensionless parameter of each spectral interval to determine appropriate parameters of musical sound, which in a sequence appropriate to original recorded alternation of time intervals are transformed by a sound card into a brain music; recording the brain music on a magnetic medium; and using an external sound effect of the brain music for a music therapy.

11. (New) A method of influencing the body, comprising the steps of registering physical parameter biopotentials; transforming and processing of obtained data to calculate a biosignal characteristic generalized parameter; transforming the biosignal characteristic generalized parameter on the basis of

detected criterial correspondence into a control signal and forming an external sound effect; implementing the external sound effect in the form of generation of musical sounds by a parametric variation tone, volume and duration thereof in criterial relation to variation of discrete current values of the characteristic generalized parameter of a frequency spectrum of the transformed biosignal; isolating from register graphic information time intervals of identical duration and transforming the time intervals using Fourier harmonic analysis into a frequency spectrum; determining a generalized characteristic dimensionless parameter from each spectral interval; forming a proportional range of musical sound parameters between minimum and maximum diameters of the generalized dimensionless parameters; determining appropriate values of sound tone, volume and duration from each spectral interval by numerical value of its generalized dimensionless parameter; transforming the appropriate values of sound tone, volume and duration by a synthesizer into sound signals formed in a sequence that corresponds to initially recorded discrete current alternation of time intervals; and implementing the determination of the generalized dimensionless parameter by ratio of power spectral density of at least two characteristic frequency bands isolated in each spectral interval.

Please provide the following new abstract of the disclosure:

A method of influencing the body has the steps of registering physical parameter biopotentials, transforming and processing of obtained data to calculate a biosignal characteristic generalized parameter, transforming the biosignal characteristic generalized parameter on the basis of detected criterial correspondence into a control signal and forming an external sound effect, implementing the external sound effect in the form of generation of musical sounds by a parametric variation tone, volume and duration thereof in criterial relation to variation of discrete current values of the characteristic generalized parameter of a frequency spectrum of the transformed biosignal.